

Notice of Allowability

Application No.

09/606,050

Examiner

Aaron Strange

Applicant(s)

HONMA ET AL.

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 10/28/2004.
2. ☒ The allowed claim(s) is/are 15, 18, and 19-27, renumbered 2, 1, and 3-11.
3. ☒ The drawings filed on 10/25/2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

KRISNA LIM
PRIMARY EXAMINER

Allowable Subject Matter

1. Claims 15 and 18-27 are allowed.
2. The following is an examiner's statement of reasons for allowance:
3. With regard to independent claim 18 and its' respective dependents, the prior art of record fails to disclose all of the limitations of independent claim 18. Notably, the prior art of record describes management software systems for management of storage area networks (Brown et al., US 6,148,414), and further discloses systems for management of storage resources in a storage area network (Nolan et al., US 6,640,278) and even further discloses systems for serverless backup on a storage area network (Pathlight & Computer Associates, "Deliver server-free backup"). However, the prior art of record does not disclose a system as claimed, and as enabled by the specification, where the management software for the storage area network realizes acquisition of statistical information of resources of logical volumes, manages the volumes in accordance with the statistical information including usage of logical devices composing the logical volumes, predicts future usage of the logical devices based on the usage, and allocating logical devices in response to a command based on the future usage prediction.
4. With regard to independent claim 23 and its' respective dependents, the prior art of record fails to disclose all of the limitations of independent claim 23. Notably, the prior art of record describes management software systems for management of storage area

networks (Brown et al., US 6,148,414), and further discloses systems for management of storage resources in a storage area network (Nolan et al., US 6,640,278) and even further discloses systems for serverless backup on a storage area network (Pathlight & Computer Associates, "Deliver server-free backup"). However, the prior art of record does not disclose a system as claimed, and as enabled by the specification, where the management software for the storage area network manages volumes in the storage area network in accordance with usage information obtained from disk drives about logical devices composing logical volumes in the storage area network, predicts future usage of the logical devices based on the usage information, and allocating logical devices in response to a command based on the future usage prediction.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS

4/20/2005



KRISNA LIM
PRIMARY EXAMINER